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HERBAL MEDICINES: A BLESSING WITH SPECIFIC PATHOLOGY COMPLICATION

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ABSTRACT
Herbal medicines and herbal treatments have been used for centuries and are widely recognized and so scientists are interested in this field. About 80 percent of the population relies on herbal products because they are deemed healthy, reliable and economical and have no side effects. The different parts of both plants (A. Indica and M. Koenigii) are also used by tribal communities and therefore the review focuses on certain pharmacological and biochemical molecular roles of the plant, such as cardiovascular, anti-diabetic and anti-hyperlipidaemia, antimicrobial, anti-oxidant, cytotoxicity, diarrhoea activity, antifungal and a wide range of properties. They can therefore serve as an important and healthy supplement in the treatment of different pathological conditions.

KEYWORDS: A.indica, M. koenigii, Medicinal activity, Treatment.

INTRODUCTION
India is abundant in medicinal herbs, and man uses plants in many forms to fulfill his essential needs for food, clothes and shelter.Humans have been utilizing medical plants. Since the advent of human culture, natural goods such as herbs, herbal teas, practical food additives, therapeutic raw materials, aromatic seeds, essential oils, flavourings, fragrant items and nutritional supplements are of great significance to mankind.[1] The two species of neem are: A. indica, A. juss and M. azedarac, the first one ispopularly known as Indian neem (margosa tree) or Indian lilac, and the other is known as the Persian lilac. Neem has been commonly used in ayurveda, unani and other common remedies, and since 135 compounds have been extracted from various parts of neem. The compounds is classified into two major classes: isoprenoids in which diterpenoids and triterpenoids containing protomeliacins, limonoids, azadirone and its derivatives, gedunin and its derivatives, vilasinin type of compounds and C-secomeliacins such as nimbin, salanin and azadirachtin) and second one includes which are mainly proteins non-isoprenoids, (amino acids) and carbohydrates (polysaccharides), sulphurous compounds, polyphenolics such as flavonoids and their glycosides, dihydrochalcone, coumarin and tannins, aliphatic compounds, etc. moeopathicmedicine. Thus the herbal drugs are used very often.[2]

Neem Biological Function
Neem has been used for several decades and provides Anti-inflammatory; Anti-arthritic; Anti-pyretic; Hypoglycaemic; Anti-gastric ulcer; Spermicide; Anti-fungal; Anti-bacterial; Diuretic; Anti-malarial; Anti-tumour; Immunomodulatory provides a broad variety of treatment-critical practices.This is frequently used in the diagnosis of rheumatism, persistent syphilitic sores and indolent ulcers. The widespread usage of neem out of multiple skin infections is also ruled out by numerous studies performed in the past. Bark, herb, plant, flower and fruit often heal blood morbidity, biliary symptoms, swelling, skin ulcers, burning sensations and pthysis. The branches of Azadirachtaindica (neem) arevery popular for cleaning the teeth used as datum.[3]

Phytochemistry Immuno-stimulativebehavior
The usage of neem bark and leaf extract has also been found to be anti-complementary and immunostimulant. Neem oil induces selective activation of cell-mediated immunity in order to enhance the reaction to mitogenic or antigenic attacks, and the change has produced good results.

Hypoglycaemic procedures
Aqueous intake of neem leaves attenuates blood sugar levels and reduces elevated glucose and cortisol levels. Previously, hypoglycaemic symptoms with leaf extract

and seed oil were recorded in normal and alloxan-induced diabetic rabbits.

Cause of antiulcer
The leaf and bark aqueous neem extracts showed a strong anti-secretory and anti-ulcer influence.

Anti-fertility influence
Intravaginal usage of neem oil, prior to coitus, inhibits miscarriage and has been shown to be an efficient contraceptive agent. It may be a modern form of contraceptive.

Antimalarial behaviour
Neem seed and leaf extracts are selective against two major forms of parasitic infection, namely chloroquine-resistant and susceptible malaria strain parasites.[4]

Antimicrobial development
Neem leaf extracts, neem oil seed kernels are selective against other fungi like Trichophyton, Epidermophyton, Microspor Trichosporon, Geotricum and Candida.

Antibacterial Behavior
The oil derived from the leaves, seeds and barks demonstrated a broad variety of antibacterial activities toward Gram-negative and Gram-positive microorganisms, the main ones being M. Tuberculosis and streptomycin-resistant varieties.It also causes inhibition in vitro Vibrio cholera, Klebsiellapneumoniae, Mtuberculosis and M. pyogenes. Antimicrobial effects of neem extract have demonstrated against Streptococcus mutans and S. faecalis.

Antiviral behaviour
The aqueous leaf extract of herbal plant provides antiviral action against the virus Vaccinia, Chikungemya and measles virus.

Behavior of anticancer
Neem leaf aqueous extract is an efficient suppression of oral squamous cell carcinoma caused by dimethylbenz anthracene, as shown by modification of neoplasm progression. Neem that exercise its chemopreventive impact in oral mucosa by demonstrating the function of glutathione and its metabolizing enzymes in cancer progression.[5]

Regulation of antioxidants
Antioxidant function of neem seed extract was demonstrated in vivo during the germination of horse-grain muscles.

Impact on the central nervous system
Central nervous system (CNS) depressant activity in mice was showed with the leaf extract. Fractions of acetone extract of leaf also showed significant CNS depressant activity.

Possible neem pharmaceutical uses
Extract Neem
It induces an important intervention to treat ringworm, eczema and scabies. Lotion extracted from neem leaf, when applied locally, will heal these dermatological diseases within 3-4 days in acute stages or 15 days in chronic cases. Paste prepared with neem and turmeric was found to be successful in the treatment of scabies in a clinical trial.

The usage of neem leaf extract was recommended for oral use in the management of malaria by homeopathic Indian practitioners so several decades ago. Recently, a clinical trial has been performed to determine the effectiveness of neem extract to manage elevated lipid levels in a subjective patient with P. falciparum heavily contaminated malaria.[6]

Murrayakoenigii
Murraya Koenigii is identified by various synonyms such as karipatta in Hindi and has a heavy peculiar scent. People usually use fresh leaves, dried leaves and essential oil for soups, curries, fish and meat dishes, etc. It is sometimes used as a stimulant, an anti-dysentric factor and in the diagnosis of diabetes mellitus. The plant is highly regarded for its leaves as an important component in Indian cuisine to stimulate appetite and digestion. The seeds, root and bark are used as tonic, digestion and carmin. The roots and the leaves of M. Koenigiiare salty, acrid, refrigerant, anti-helminthic, analgesic. It is also effective for leucoderma and blood diseases. Root juice has also arisen owing to kidney-related discomfort. The division of M. Koenigii is very good for teeth brushing and is used as a date.It is primarily present in tropical Asia, such as the foothills of the Himalayas of India, Sri Lanka, Myanmar, Indonesia, Southern China, and Hainan and other nations.[7]

Phytochemistry by M. koenigii
Mature leaves produce 63.2 per cent moisture, 1.15 per cent total nitrogen, 6.15 per cent fat, 18.92 per cent total sugar, 14.6 per cent starch, 6.8 per cent synthetic fiber, 13.06 per cent ash, 1.35 per cent acid insoluble ash, 1.82 per cent alcohol soluble extractive, 27.33 per cent cold water (20 C) extractive and a limit of 33.45 per cent hot water soluble extractive.[8] The leaves are aromatic and produce proteins, vitamins, starch, nutrients, carotene, nicotinic acid and vitamin C. This also includes vitamin A and calcium The leaves have large amounts of oxalic acid, the leaves often include crystalline glycosides, carbazole alkaloids, koenigin, resin, the fresh leaves produce 2.5 percent yellow oil. It also possessesgirinimbin, iso-mahanimbin, koenine, koenigine, koenidine and koenimbine. Compounds such as Mahanimbicin and bicyclomahanimbicin, phebalosin, coumarin, Murrayoneimperatoxin, etc. extracted from plants. Bark includes primarily carbazole alkaloids such as murrayacin, murrayazolidine, murrayazoline, mahanimbine, girinimbine, koenioline, xynthyletin.[9]

Antibacterial Behavior

Studies done in previous studies has shown the M critical oil. Koenigii leaves display an important antibacterial activity against different B stains. Subtilis, Staph, guy. Hey, Aureus, C. Pyogens, P. vulgaris and Pasteurellamulticida. Pure oil was active against the first three species at a dilution of 1: 50027. Acetone extract from the new leaves of M. Koenigii on fractionation provides three bioactive carbazole alkaloids called mahanimbine, murrayanol and mahanine, which have been shown to suppress mosquitocidal, antimicrobial and topoisomerase activities I and II.[10]

Antifungal Behavior

An isolate of acetone from M. Koenigii had a defensive influence against Aspergillus niger. This benzene extract is particularly potent against Alternariasolani and Helminthosporiumsolani and the ethanol extract has demonstrated efficacy against Penicillumnotatum.

Antioxidant Behavior

The research has indicated that the anti-oxidative effects of the M extract have been demonstrated. Koenigii leaves and has been shown to be involved in various solvents. They were tested on the basis of the oil stability index (OSI) along with their radical scavenging capacity against 1-1-diphenyl-2-picryl-hydrazile (DPPH) and thus prove to be of the utmost importance.The methylene chloride (CH2Cl2) extract and the ethyl acetate (EtOAc) soluble portion of the 70% acetone sample is slightly longer than the OSI levels of tocopherol and BHT. Five carbazole alkaloids were extracted from the CH2Cl2 extract and their structures were known as euchrestine, bismurrayafoline, mahanine, mahanimbicin and mahanimbine. Tests were obtained using 1H and 13C NMR and mass (MS) spectral details.

Cytotoxic Behavior

The alkaloid coenoline is derived from the root bark of M. Koenigii has been shown to demonstrate cytotoxic behavior against the KB cell culture system. Carbazole alkaloids isolated from the stems are found to have significant effects in the growth of the human leukaemia cell line HL-60. Mahanine, Pyrafoline-D and murrafoline-I (Carbazole alkaloids) showed significant cytotoxicity against HL-60 cells and cause a significant loss in mitochondrial membrane potential.[11]

Anti-inflammatory Behavior

Stem bark of alcoholic extract at a dosage of 1 gm / kg body weight had a defensive benefit against carrageenan-induced inflammation. Crude root extract has also demonstrated anti-inflammatory behavior in the rat study Theethanolic extract at doses of 300 and 400 mg / kg also demonstrated antihistamine activity in the histamine-aerosol regimen in the rodent model. It has been proposed that the mast cell stabilization and antihistamine activity of EEMK are probable pathways for its anti-inflammatory action and hence enhance its therapeutic benefit.

Antidiarrhoeal intervention

Bioactive alkaloids, such as kurryam and koenimbine, derived from fractional n-hexane extract of M plants. Coenigii has been shown to suppress the activity of castor oil-induced diarrhoea and prostaglandin E2-induced enteropooling in Wistar rat strain in Wister rat charcoal meal studies.Such compounds have been shown to show substantial decreases in gastrointestinal motility and play a function in the analysis of the modulatory position of disease progression.[12]

CONCLUSION

Azadirachta Indica and Murraya Koenigii are flexible plants and have been used for decades as a rich source of multi-potent medicinal plants. All plants provide the best classical approach to discovering new lead molecules for the treatment of different diseases. Murrayakoenigi is a multi-potent medicinal herb. About any section of the facility has a range of medical uses. This should also be found to be the most suitable choice for the development of new medicines. The potential research requires the successful separation of the various components in a systematic fashion, such that results can be extrapolated in clinical trials in order to create a better path for the good of mankind by utilizing these herbal molecules and thereby appear as more efficient medicinal methods to counter the disease.

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